

EXHIBIT 3



March 29, 2024

Ms. Lindsey G. Ferguson and Mr. Richard H. Hill, II
Weinberg, Wheeler, Hudgins, Gunn & Dial, LLC
3344 Peachtree Road, NE
Suite 2400
Atlanta, GA 30326

Re: **Bryson, Santana vs. Rough Country**

Dear Ms. Ferguson and Mr. Hill:

Per your request, I am submitting this report regarding my opinions to date in the above referenced matter. The purpose of this report is to set forth my general qualifications and opinions to date of the injury mechanisms and injury causation involved in this incident based upon a biomechanical assessment of the incident scenario.

My education includes degrees in both engineering and medicine. I received a Bachelor of Science degree (Electrical Engineering) from Illinois Institute of Technology in 1987. In pursuit of that degree, I studied the sciences, including physics, chemistry, mathematics, metallurgy, statics, dynamics, and thermodynamics. I have a Bachelor of Science degree in Nursing (summa cum laude). Studies included all aspects of nursing care, including emergency nursing. I attended medical school at Midwestern University and graduated in the top ten percent of my class. During the first two years of medical school, in addition to clinical medicine, I studied anatomy in the cadaver lab, physiology, biochemistry, psychology, and pathology. I completed core rotations in subjects such as internal medicine, pediatrics, cardiology, and surgery. There was also ample time for electives, and my choices included trauma and medical intensive care, emergency medicine, neurology, pathology in the county coroner's office, and radiology.

My professional career includes working at Ford Motor Company for six years as a test engineer and a fuel systems development engineer. During my training program at Ford, I worked on cars, light trucks, and heavy trucks. I was involved in exhaust and evaporative emissions testing, durability testing with stress and strain measurements on various structural and body components, and heavy truck performance and durability testing. After my training program, I was recruited by the truck division, and worked as a fuel systems development engineer. I was responsible for fuel system components in all current and past F-series light trucks and Econoline vans. I resolved assembly plant, customer and dealership concerns throughout North and Central America. I coordinated a safety campaign involving the recall of 1.5 million trucks to correct a fuel system concern.

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During my career at Ford, I sought training as an emergency medical technician, and became a nationally registered EMT. I worked part time on weekends providing emergency care to the sick and injured. I also volunteered for my local fire department as a fire fighter/EMT, where I received training and experience with firefighting and vehicle extrication procedures to augment my patient care activities. In 2016, I became certified as a Fire/Arson Investigator.

During my eight years as a registered nurse, I worked in rural, reservation, and urban emergency departments. I achieved certification in emergency nursing. I pursued additional training in forensic nursing and acted as my department's sexual assault examiner and domestic violence advocate.

I am board certified in emergency medicine after completing an emergency medicine residency in 2006 at the University of Kentucky. The vast majority of the three-year program was spent caring for patients in the emergency department, but I also had rotations in trauma and surgical intensive care, pediatrics and pediatric intensive care, internal medicine, obstetrics, orthopedic surgery, air medical transport, and EMS. During the last two years of residency, I worked in several rural emergency departments as the sole physician. I was also part of the team of physicians who provided emergency medical care at Kentucky Speedway. As my academic project, I co-authored a book chapter on the care of trauma patients.

After residency, I worked full-time for six years at a rural emergency department in Wyoming. There were few resources or specialists, and I cared for all patients with very little support. I acted as medical director for the trauma service, evaluating and improving the care provided for all serious trauma patients seen in the ER. Additionally, I worked part time at a rural Indian Health Service emergency department in Montana, an urban Indian Health Service emergency department in Phoenix, two other rural Wyoming ERs, and a larger community Wyoming ER. Since 2008, I have been volunteering my medical expertise at clinics for the uninsured. Upon joining BRC, I continued working part time as an emergency physician. Since 2009, I have been volunteering as an examiner for the American Academy of Emergency Medicine Oral Board Review Course. I am also an Assistant Clinical Professor at the University of the Incarnate Word medical school.

Over the course of my thirty-five-year career as an emergency provider, I have directly cared for thousands of trauma patients with neurological, orthopedic, cardiopulmonary, and abdominal injuries, some fatal, some life and limb-threatening, and some minor.

I am currently licensed to practice medicine in Texas, Colorado, Wyoming and Montana. I am a Fellow of the American College of Emergency Physicians and the American Academy of Emergency Medicine. I hold certifications in Trauma, Cardiac, Burn, and Pediatric Life Support.

I am currently employed as a consultant in the field of biomechanics. In addition to my training and experience as a physician and automotive engineer, I have been trained in accident reconstruction and am certified by ACTAR. I am involved in current research efforts evaluating restraint systems in frontal crash scenarios in lift trucks. I have co-authored papers regarding

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whole body accelerations, crash reconstruction, lumbar accelerations in everyday activities, head accelerations in low-speed rear end collisions, and the risk of injury in low-speed rear end impacts, and the risk of injury in lift truck off-dock and tip-over events, and analysis of restraint system effectiveness in lift truck frontal collisions.

My professional background is documented in the attached copy of my curriculum vitae. My testifying history is documented in the attached document. My time is billed by Biodynamic Research Corporation at \$700 per hour.

During the course of my study of this matter, I have had access to the following items:

- Georgia Motor Vehicle Crash Report;
- Georgia State Patrol Specialized Collision Reconstruction Team Report:
 - Team Information
 - Collision Information
 - Investigative Summary
 - Hunter Elliott Offenses Charged
 - Scaled Diagrams
 - Roadway Information
 - Driver #1 Information (Elliott)
 - Official Report – Division of Forensic Sciences – Blood Alcohol (Elliott)
 - Vehicle #1 Information
 - CDR File Information
 - Safety Issues & Recalls
 - Driver #2 Information
 - Occupant Information Vehicle #2
 - Official Report – Division of Forensic Sciences – Autopsy
 - Vehicle #2 Information
 - Safety Issues & Recalls
 - Arrest Information (Elliott)
 - Witness List
 - NIBRS Incident Report (Elliott)
 - Fannin County 911 Call Report
 - Weather History
 - Photographs;
- GDPS SCRT Call History Record on 03/15/20;
- CDR File Information – 1FT7W2BT9GEC79140 (2016 Ford F-250; Imaged on 04/03/20;
- Restraint Control Module Report – 2008 Ford Escape 1FMCU03178KA77952 on 04/10/23;
- Expert Reports of:
 - Christopher Roche dated 10/12/23
 - G. Bryant Buchner, P.E. dated 10/12/23
 - Paul R. Lewis, Jr., MS. BME dated 10/16/23;
- Materials Review from the File of Jonathan Eisenstat – not dated;

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- Supplemental Report of Paul R. Lewis, Jr., MS, BME dated 03/15/24;
- Various Pleadings & Discovery;
- Depositions of:
 - Trooper Andrew Phillips w/Exhibits taken on 04/26/23
 - Joshua Bryson w/Exhibits taken on 04/12/23
 - Santana Bryson w/Exhibits taken on 04/12/23
 - G. Bryant Buchner, P.E. w/Exhibits taken on 01/23/24
 - Christopher D. Roche w/Exhibits taken on 02/01/24
 - Rad J. Hunsley w/Exhibits taken on 08/04/23
 - Jonathan Eisenstat, M.D. w/Exhibits take on 01/15/24;
- Court Transcript of Hunter Elliott's Bond Hearing on 04/24/20;
- Court Transcript of Hunter Elliott's Hearing on Plea and Sentencing on 05/06/21;
- 55 Color Photographs of 2016 Ford F-250 VI;
- 1 Color Photograph of Georgia Limited Permit of Hunter Ethan Elliott; Iss. 04/08/2016;
- 8 Color Photographs of Plaintiffs at Fannin County Regional Hospital;
- 8 Color Photographs of Kelley Santana's Injuries;
- 18 Color Photographs of Autopsy of Cohen Bryson on 03/16/20;
- 2 Color Photographs of Statement of Funeral Goods and Services Selected for Cohen Zayne Bryson;
- 134 Digital Color Photographs of Site, 2008 Ford Escape;
- 62 Digital Color Photographs of 2008 Ford Escape VI on 04/03/20;
- 23 Digital Color Photographs of 2016 Ford F-250 VI on 04/03/20;
- 24 Digital Color Photographs of 2016 Ford F-250 VI on 04/20/20
- 8 Digital Color Photographs of 2016 Ford F-250;
- 2 Digital Color Photographs of Orthomosaic Map of Site by GDPS SCRT;
- 144 Digital Color Photographs of 2016 Ford F-250 VI by GDPS SCRT;
- 96 Digital Color Aerial Photographs of Site by GDPS SCRT;
- 207 Digital Color Photographs of Scene by GDPS SCRT;
- 2 Color Photographs of 2008 Ford Escape by SCRT;
- 76 Color Photographs of 2016 Ford F-250 VI on 03/24/20;
- 18 Digital Color Photographs of Autopsy and X-Ray [pdf format] of Cohen Bryson by Fannin County Coroner;
- 425 Digital Color Photographs of 2008 Ford Escape & 2016 Ford F-250 VI by Paul R. Lewis, Jr., MS, BME (Undated);
- 139 Digital Color Photographs of Exemplar Ford Escape VI by Paul R. Lewis, Jr., MS, BME (Undated);
- 3 Color Videos of Body Cam Footage of Hunter Elliott at Scene;
- 2 Color Videos of Body Cam Footage of Hunter Elliott at Fannin County Regional Hospital;
- 2 Color Videos of AR Animation by GDPS SCRT;
- 1 B&W Video of GDPS Traffic Camera Footage of Crash;
- 1 Color Video of Dash Cam Footage at Fannin County Regional Hospital;

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- 1 Color Video of Rear Dash Cam Footage of Hunter Elliott;
- Color Video of 2016 Ford F-250 VI;
- 1 Color Video of Dash Cam Footage of Scene;
- 1 Color Video of Body Cam Footage of Scene;
- 2 Audio Recordings of 911 Calls Reporting Crash on 03/15/20;
- 1 Audio Recording of 911 Dispatch on 03/15/20;
- Download Containing Legal, Photographs, Reports, Videos, Testing Photographs, Videos, Data, and Report by Exponent from Testing Run on 05/15/23, Photographs Produced by Georgia Bureau of Investigation [GRAPHIC], Photographs of Exemplar Vehicle Inspections by Charlie Crosby, File Materials of G. Bryant Buchner, P.E., and Supplemental Report and Additional File Materials of Paul R. Lewis, Jr., MS, BME;
- Ronnie Thompson Ford Records;
- Auto Insurance Declaration Pages for 2016 Ford F-250 from Progressive;
- Commercial General Liability Insurance Policy for Rough Country, LLC effective 01/10/20;
- NIBRS Incident Report on 03/16/20;
- Berla iVe Report for 2016 Ford F-250 on 04/17/19 {sic}, Acquisition Date 04/17/20 by Collision Specialists, Inc.;
- Expert Auto Stats for 2016 Ford F-250 on 07/16/20;
- Expert Auto Stats for 2008 Ford Escape on 07/03/20;
- Limited Liability Release;
- Underinsured Motorist Coverage Release;
- Correspondence to Ford Motor Company dated 03/25/21;
- Documents Produced by Rough Country, Inc.;
- State of Georgia Arrest Warrants for Hunter Ethan Elliott;
- General Bill of Indictment for Hunter Ethan Elliott;
- Petition to Enter Plea of Guilty by Hunter Ethan Elliott;
- Final Disposition: Felony Sentence with Probation;
- File Materials of Jonathan Eisenstat, M.D.;
- File Materials of Paul R. Lewis, Jr., MS, BME; and
- Medical Records of Cohen Bryson from the following:
 - Fannin County EMS 03/15/20
 - Fannin Regional Hospital 03/15/20
 - Fannin County Coroner – Kevin Dills, Deputy Coroner 03/15/20
 - Division of Forensic Sciences – Jonathan Eisenstat, MD, CME 03/17/20
 - Henderson & Sons Funeral Homs
 - Death Certificate.

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I have arrived at the following opinions, based upon a reasonable degree of medical and scientific certainty:

INCIDENT

On March 15, 2020 Mrs. Santana Bryson, age 23, was the restrained driver of a 2008 Ford Escape which was stopped at a red light on westbound Georgia State Route 2 at Blue Ridge Drive in Blue Ridge, Georgia. Her husband, Mr. Joshua Bryson, age 24, was the restrained right front passenger. Their son, Master Cohen Bryson, age 2, was seated in a Dorel Grow and Go Sprint forward-facing child safety seat in the row 2 left position. According to the police report, Mr. Hunter Elliott, age 23, operating a 2016 Ford F-250, struck the rear of the Bryson Ford Escape. Mr. Elliott then proceeded to attempt to leave the scene by placing his vehicle in reverse and traveling east, but his vehicle came to a stop at the east side of the intersection due to mechanical failure. Mr. Elliott then exited the vehicle and fled the scene on foot. When he returned to the scene, he stated to police that he had been drinking. Mr. Elliott said he was not the driver of the F-250, but the driver was his pregnant fiancé. Mr. Elliott then admitted that she was not driving that in fact he was the driver. While on scene of the accident, police observed that the black Ford F-250 had well over 25 open Budweiser beer containers within reach of the driver. Witnesses Thomas Baker and Trenton Rhodes arrived on scene right after the collision. Both had seen a male subject, later identified as Mr. Elliott with a grey shirt and red shorts run from the F-250 down the hill on the south side of the intersection. They checked the F-250 for other occupants, but no other occupants were in the truck. They then ran after Mr. Elliott. When they got to the top of the hill, Mr. Elliott was coming back up the hill. Mr. Elliott told them that his buddy was driving. Mr. Baker and Mr. Rhodes observed beer in the F-250 and a strong odor of alcohol coming from inside. Police arrested Mr. Elliott for driving under the influence of alcohol.

In her **April 12, 2023 Deposition**, **Mrs. Santana Bryson** testified that they were traveling home from a birthday party at Josh's mom's house. She recalled that she began the trip in the passenger seat and switched to be the driver a couple of minutes after leaving. "And that's when I seen that Cohen was asleep in the rearview mirror...his eyes were shut and he was to the side. In the mirror, he was on the right. Like I was looking in the rearview mirror and his head was to the right-hand side [to the center of the vehicle]." Right before the crash, "I remember telling Josh, there's somebody flying up behind me with their bright lights on. Like they were, you know, come -- they came out of nowhere. And I told him that, but I did not actually -- like I said, all I seen was bright lights. I didn't see nothing else. And that's all I remember." She could not recall if she was stopped at a red light when the crash occurred. "And the next thing I remember, waking up win the hospital." She did not remember the impact, getting out of the vehicle, walking around, or seeing Cohen at the scene.

Mrs. Bryson stated that she was pregnant on the date of the subject crash; her son Chander was born on March 20th and remained in the NICU for four months. She could not recall the positions of an umbrella stroller, shop vac, or "camping chairs" in the cargo area of the Escape at the time. "I want to say the camping chairs were on the bottom cause we don't ever use those,

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and then the umbrella and shop vac were on the top. So everything of that was in the back of it. And then the bag of clothes, I want to say it was in the back.”

In his **April 12, 2023 Deposition, Mr. Joshua Bryson** testified that he was a passenger in the Ford Escape in the crash on March 15, 2020. Santana, Joshua, and Cohen traveled to Joshua’s mother’s, for a birthday party on the day of the crash. Mr. Bryson stated that they left for the return trip home at approximately 11:00 p.m. He stated that Santana was driving and Cohen was put in his car seat [behind the driver’s seat] by his mother. Mr. Bryson recalled that when they were leaving, he was driving but when they got to the end of the driveway, Santana wanted to drive and they switched seats. Cohen was sleeping when they checked on him when they “swapped” seats. “And then I have a small memory of going to the red light because I remember Santana saying somebody behind her had very bright lights. And that’s really the last thing that I can remember from that night for the accident.” Mr. Bryson stated he sustained a concussion. “I remember my back had been broken and I remember riding in the ambulance...I don’t remember, like, visual cues or anything beyond just getting woken up from the pain for a brief second, then going back out.” He later learned that the other driver was driving under the influence.

Mr. Bryson confirmed that, at the time of the crash, there was a shop vac, an “umbrella stroller”, a “bag of clothing” and two “camping chairs” in the cargo space of the Escape; he could not recall if they were positioned on the left or right side of the vehicle.

According to the **Court Transcript of Mr. Hunter Elliott’s Bond Hearing on April 20, 2020**, Mr. Elliott was the intoxicated driver of the subject Ford F-250 responsible for the subject crash on March 15, 2020. As a result of the crash and the fatality of Cohen Bryson, Mr. Elliott faced several charges including homicide by vehicle in the first degree. During the proceedings, several witnesses were called by the State and the Defendant.

Trooper Shane Matheson testified as to his involvement in the crash’s investigation. Trooper Matheson executed a search warrant for Mr. Elliott’s blood, which returned with an alcohol concentration of 0.252; over three times the legal limit. It was determined Mr. Elliott was on the phone with his fiancée when the crash occurred. Mr. Elliott’s prior DUI charges and convictions were discussed; Mr. Elliott possessed two prior convictions for DUI, the subject crash being his third. Video footage taken of Mr. Elliott inside Trooper Matheson’s patrol car was reviewed in which, before being transported to jail, Mr. Elliott can be heard stating to his mother, “They have nothing on me and that they don’t even know I was in the f***ing truck or the f***ing vehicle.”

According to the **Court Transcript of Mr. Hunter Elliott’s Hearing on Plea and Sentencing on May 6, 2021**, as a result of his involvement in the subject crash on March 15, 2020, Mr. Elliott pled guilty to “homicide by vehicle in the first degree, resulting in the death of Cohen Bryson.” His total negotiated sentence amounted to 40 years; he will only serve 20.

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In his **April 26, 2023 Deposition, Trooper Andrew Phillips** testified that he is on the SCRT team for the Georgia State Patrol. Trooper Matheson was the primary responder to the crash and Trooper Phillips communicated with him during the investigation. The summary of his investigation was from information he gathered. The Ford Escape and the Ford F-250 were in the left lane traveling west. Trooper Phillips reported that Hunter Elliott, the driver of the F-250, was under the influence of alcohol as determined by his blood results; Hunter Elliott also admitted that he was on his cell phone FaceTiming his fiancé at the time of the collision. The blood draw alcohol level was .252. Trooper Phillips also reported and concluded that Santana Kelley, Ford Escape, was stopped in the left lane at the red light at the time of the crash. Mr. Elliott's F-250 was traveling 52 mph 5 seconds before impact and at the point of impact he was traveling 50 mph. Trooper Phillips determined that Cohen's car seat was properly installed as he reported; the expiration for the child restraint was 2028. He could not recall the contents in the cargo area of the Ford Escape. "About the only thing that I can recall was maybe a stroller in the back."

MEDICAL

According to his medical records, Master Cohen Bryson was in cardiopulmonary arrest on scene. Despite resuscitation attempts, Master Bryson was pronounced dead at 11:57 pm. His acute injuries included: right temporal subscalpular hemorrhage, right temporalis muscle hemorrhage, depressed skull fracture – right sphenoid [corrected to temporal] with extension along the petrous ridge [and continuing to both sides of the foramen magnum], atlanto-occipital disarticulation, pontomedullary laceration, subarachnoid hemorrhage at the brain base, right ear helix contusion and abrasions, scalp abrasion behind right ear, right otorrhea positive for cerebrospinal fluid, right lateral upper eyelid contusion and edema, left radius and ulna fracture, anterior right thigh contusion, antero-medial left thigh contusion, left femur fracture, scattered contusions on bilateral thighs/knees/legs. His height and weight were 34.3 inches and 28 pounds, respectively.

In his **January 15, 2024 Deposition, Dr. Jonathan Eisenstat** testified that he was the medical examiner who performed Master Cohen Bryson's autopsy. He stated the child was seated in a car seat in the rear of the vehicle, behind the driver. He opined the atlanto-occipital dissociation (AOD) was caused by a blunt impact to the child's head and neck. He confirmed the child suffered a subarachnoid hemorrhage. Dr. Eisenstat stated there were a few small, scattered contusions around the thighs, knees, and legs of the subject. He discussed the child had two diagonally oriented contusions on his thighs which was consistent with the type of harness restraint in the car seat. In Dr. Eisenstat's autopsy report, pg. 2, he stated he made a mistake where it reads, "there is a depressed underlying fracture of the right sphenoid bone with linear extension along the right petrous ridge", it should say "temporal bone" instead of "sphenoid bone". He also noticed in Exhibit 5, Bryson 000048, there was a line of fracture that continues at the petrous ridge, and then to the ring around the foramen magnum where he found there was a fracture on both sides of the ring, which was not noted in the autopsy report. Based on the findings on the ring of the foramen magnum, Dr. Eisenstat stated it indicated this was an impact injury to the right temporal because there was no fracture on the left temporal. He explained the periorbital ecchymosis came from the fracture of the base of the skull and the blood leaking

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down through the tissues. Dr. Eisenstat described the laceration of the pontomedullary junction was due to the spine cutting the brainstem. He stated the laceration, as opposed to transection, meant the child did not die immediately. He believed when the AOD happened, the child was unconscious within milliseconds. He acknowledged the blunt impact was to the right ear area.

RADIOLOGY

On March 3, 2023, I reviewed Master Cohen Bryson's imaging studies with Dr. Ryan Hernandez, a board-certified radiologist. In addition to the reported injuries, there were also fractures of the right distal tibia and fibula. Please see Dr. Hernandez' report for further detail.

PHOTOGRAPHIC ANALYSIS

Photographs of the Ford Escape on scene demonstrated rear crash damage. The spare tire was on the roadway behind the vehicle. The right front passenger seat back was yielded so the head restraint was in contact with the Row 2 right seat back. There was a forward-facing child safety seat in the row 2 left position. The child safety seat was not in contact with the driver's seat back. The row 2 seat backs were deformed forward. The cargo cover was pushed forward so the left end overrode the child seat.

Autopsy and coroner photographs of Master Bryson demonstrated: right periorbital ecchymosis, right ear hematoma, right bloody otorrhea, right temporal scalp hematoma and skull fracture, fracture extension to the right posterior fossa and across the foramen magnum, brainstem laceration, and bilateral upper anterior thigh bruising. There was no hematoma at the left tibial intraosseous insertion site.

Photographs of Mrs. Bryson's injuries demonstrated: an abrasion in her hair at an unclear location, bruising on her right and center forehead, a laceration and bruising on her left posterior proximal arm, scattered bruising on her posterior right forearm, and linear abrasions on her ?left? distal thigh. The two photographs of Mr. Bryson do not demonstrate any visible injuries.

VEHICLE INSPECTION

On March 6, 2023, I inspected the subject vehicles. The Ford Escape demonstrated rear crash damage, greater on the left than the right. The front seats were upright and undeformed. The row 2 left door opening was foreshortened; the left C-pillar underrode the door, and the door shell was deformed. The row 2 seat back was deformed forward. The seat back was a 60L-40R split, so the left side was rotated counterclockwise when viewed from above. The row 2 left seatbelt webbing was advanced and locked in place. The row 2 center position belt guide was seat-mounted inboard of the row 2 left head restraint mounts. The belt guide was stress-whitened and deformed on the left front corner. The Dorel Grow and Go Sprint child safety seat was found in a packaging box. The polymer shell demonstrated stress-whitening throughout. There were focal tears in the cloth covering on the upper aft corners. The shell was stress-whitened under the tears. The shell was deformed under the upper right corner cloth tear. The

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shoulder harness slot adjustment was deformed. The 5-point harness webbing was cut. The aft surfaces of the row 2 seat backs were abraded, discolored, and torn. A spare tire was in the vehicle; the rubber was torn. Two camping chairs were found in the cargo area; one chair's legs were bent. A shop vac was also in the cargo area; the drum was flattened and the shell was shattered.

CRASH RECONSTRUCTION

According to the crash reconstruction of Mr. Wesley Grimes, the Ford Escape was stopped or moving slowly while the Ford F-250's impact speed was 49 – 53 mph. There was a slight offset of the Ford F-250 to the left of the Ford Escape. The Escape experienced a delta-V of 34 – 42 mph with a principal direction of force (PDOF) of approximately 6 o'clock.

CRASH TESTING

Crash testing was performed on May 15, 2023 at Exponent. I was in attendance along with Mr. Grimes. The target vehicle was a stationary 2008 Ford Escape. The cargo cover was in place, but the cargo area was empty. The full-size spare tire was replaced with a space saver spare tire. The bullet vehicle was a 2016 Ford F-250 traveling at 49.9 mph. The F-250 was equipped with original equipment suspension, tires, wheels, and no lift kit. Both vehicles were ballasted to match the weights of the subject vehicles. The vehicles were configured with a 10.9 inch offset, F-250 to the left. The front of the F-250 deformed the Escape's left C-pillar, left rear door, and row 2 seat backs. Please refer to the Exponent Test Report for further details.

OCCUPANT KINEMATICS

Occupant kinematics for the Brysons during the subject incident were determined using the reviewed materials, the crash reconstruction, the subject vehicle inspection, the radiology review, current literature, and the laws of physics. Newton's first law of motion states that an object at rest remains at rest until acted upon by a force (Young). Just prior to impact, the Escape and the Brysons were at rest. Master Bryson was asleep leaning inboard in his child safety seat. When the Ford F-250 struck the rear of the Ford Escape and deformed the rear structures including the row 2 left seat back, the child safety seat and Master Bryson were pushed forward (Fricke). When the Escape was pushed forward, Mrs. And Mr. Bryson initially remained stationary. From the frame of reference of the vehicle interior, they would appear to move backward (Fricke). Their torsos loaded their seat backs, and the seat backs yielded according to the forces applied, in order to manage the energy of the crash (Viano 2002). Mr. Bryson ramped up the seat back (James, Viano 2003), and made contact with the row 2 right head restraint. On rebound, the Brysons would move forward in the vehicle, limited by their restraint systems.

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INJURY CAUSATION

The mechanisms of Master Bryson's reported injuries were determined using the reviewed materials, the crash reconstruction, the subject vehicle inspection, the radiology review, current literature, and the laws of physics. When the Ford F-250 struck the rear of the Ford Escape and deformed the rear structures including the row 2 left seat back, the child safety seat was focally deformed in the upper right area, in the location of the right side of Master Bryson's head. This caused Master Bryson's right ear laceration and ecchymosis, temporal scalp hemorrhage, temporalis muscle hemorrhage, temporal depressed skull fracture with extension across the skull base, and subarachnoid hemorrhage at the base of the brain (Melvin, Papa, Spitz, Wright). The atlanto-occipital dissociation and brainstem laceration were also caused due to the head contact (Britt, Go, Kaji, Kondo, Nightingale, Ohshima, Spitz). Right periorbital ecchymosis occurred as a result of the basilar skull fracture, not due to contact in that area (Bilo, Melvin, Papa, Wright). Master Bryson's extremity injuries were likely the result of interaction with the driver's seat (Abraham, Chow, Courtney, Pallin, Rupp, Salzar, Wang, Weiers, Williams). Master Bryson would have been rendered unconscious immediately due to the traumatic brain injury (Margulies, McElhaney, Thibault). Cessation of cardiopulmonary function soon followed (Britt, Kondo, Zivkovic). This is demonstrated by the lack of bleeding at the intraosseous catheter site.

Mr. Lewis' analysis was incomplete. His assertion that Master Bryson's constellation of head injuries was due to contact with the driver's seat was erroneous. His skull fracture was depressed, indicating contact with a small surface with a diameter of approximately 2 inches or less (Bilo, Dundamadappa, Isa, Loyd, McGuinness, Syed, Vaughan). His initial assertion, which I understand he corrected in his deposition that the bruising around Master Bryson's eye was due to contact with the driver's seat was also erroneous. That periorbital ecchymosis was due to the basilar skull fracture, not contact. Finally, Mr. Lewis' assertion that Master Bryson's fatal injuries would have been prevented if the F-250's suspension were stock was shown to be incorrect in the Exponent crash testing.

CONCLUSIONS

- Master Bryson's head injuries were caused by contact with the focally deformed upper right area of the child safety seat. The child safety seat damage was caused by intrusion of the rear structures of the Escape.
- Master Bryson was rendered unconscious immediately, and cardiopulmonary function ceased soon after.
- If the F-250 were equipped with a stock suspension, there still would have been intrusion of the rear structures and deformation of the row 2 seat. Therefore Master Bryson's injury outcome would not have changed.

As additional information is made available to me or as new facts are uncovered during the investigation and discovery process, my professional opinions may change to reflect the newfound information. I have not yet received Mr. Lewis' deposition transcript. I will analyze that upon receipt, along with his file material produced. If needed, I will provide a supplemental

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report. The opinions expressed herein, to a reasonable degree of medical and scientific certainty, however, are current and accurately reflect my conclusions based upon the information reviewed and the analysis performed as of this date.

Should you require additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lisa P. Gwin".

Lisa P. Gwin, D.O., B.S.E.E.

LPG/tas

Attachments: Radiology Report
Curriculum Vitae
Testifying History
Billing Schedule

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Bibliography

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